

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

NOV 3 0 2011

OFFICE OF WATER

The Honorable Thomas S. Richards Mayor of Rochester City Hall Room 308A 30 Church Street Rochester, New York 14614

Dear Mayor Richards:

Thank you for your September 12, 2011, letter in which you seek clarification of the U.S. Environmental Protection Agency's (EPA) position on uncovered finished water reservoirs and request an immediate moratorium on implementation of the federal Long Term 2 Enhanced Surface Water Treatment Rule requirements as they relate to the city of Rochester. To effect this change, I understand that you are seeking our written approval to suspend your city's LT2 compliance obligations pending the EPA's regulatory review of the LT2 rule.

The LT2 rule requirements are still in effect. The rule is important for drinking water quality and public health protection. The provision that requires drinking water systems either to cover their finished water reservoirs or to treat the water leaving uncovered reservoirs before distribution to consumers is intended to protect against the potential for recontamination of treated drinking water with disease causing organisms, specifically *Cryptosporidium*, *Giardia* and viruses.

Many public water systems have already taken action to protect their drinking water as required by the rule, and many others are on a path to do so in the near future. In the 1970s, there were an estimated 700 uncovered reservoirs in the United States. In 2006, at the time the LT2 rule was promulgated, the number of uncovered reservoirs had been reduced to 81. Since then, public water systems have taken steps to cover, decommission or treat the water before distributing it to consumers at an additional 38 reservoirs. Today, only 43 uncovered finished water reservoirs are still in use, and all are under enforceable schedules to meet the LT2 rule's cover or treat requirements. Of those 43 reservoirs, most are currently undergoing construction or have schedules to complete construction during the next few years.

In her August 19, 2011, letter to U.S. Senator Charles E. Schumer, Administrator Lisa Jackson said that the EPA will review the LT2 rule and evaluate whether there are alternate ways to manage risk while ensuring equivalent public health protection. As you know, the EPA has committed to reviewing the LT2 rule as part of the agency's *Final Plan for Periodic Retrospective Review of Regulations*. In addition, the LT2 rule is among more than 70 rules that the EPA must review under the Safe Drinking Water Act's next review cycle to be completed by 2016. Under the Safe Drinking Water Act, the EPA must review existing national primary drinking water regulations at least every six years and revise them as appropriate. Additionally, the Safe Drinking Water Act specifies that any rule revision must maintain or provide for greater public health protection.

The EPA will conduct a thorough review of the LT2 rule. As part of the review, the EPA will assess and analyze new data and information regarding occurrence, treatment, analytical methods, health effects and risk from *Cryptosporidium*, *Giardia* and viruses to evaluate whether there are new or additional ways to manage risk while ensuring equivalent or improved public health protection. Science will drive our ultimate decision.

The rule review process does not provide a basis to modify the city's LT2 compliance obligations. However, there may be specific, articulable facts that warrant compliance schedule adjustments. Many public water systems face multiple challenges in managing, maintaining and operating those systems. Infrastructure construction projects can also present challenges. It is entirely appropriate for primacy agencies to consider these system specific facts when evaluating a request to adjust a compliance schedule. If a schedule adjustment is appropriate, the public water system should have in place robust interim measures to ensure public health protection, and those interim measures should remain in effect until that system comes into compliance with the rule.

During the spring of 2012, the EPA intends to hold a public meeting to focus on the uncovered reservoir issue. The city of Rochester is invited to present information, which the EPA would be happy to consider as part of its regulatory review process. We at the EPA look forward to continuing to work with the city of Rochester and other stakeholders.

In the meantime, I thank you for sharing your concerns. The EPA appreciates your city's commitment to delivering safe water to its customers. If you have questions, please feel free to contact me or your staff may call Sarah Hospodor-Pallone, Deputy Associate Administrator for Intergovernmental Relations, at (202) 564-9601.

Sincerely,

Nancy K. Stoner

Acting Assistant Administrator



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY WASHINGTON, D.C. 20460

JAN 27 2812

OFFICE OF WATER

The Honorable Jeffrey A. Merkley United States Senate Washington, D.C. 20510

Dear Senator Merkley:

Thank you for your letter of October 13, 2011, concerning the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 rule). You requested that, as the EPA reviews the LT2 rule, we "include an assessment of the unique circumstances relevant to the City of Portland's drinking water system" and that the EPA "thoroughly explore whether there are more cost-effective ways to counter the risks of contaminated water, taking into full account the unique and extraordinary water supply characteristics of Portland's Bull Run watershed and other attributes of Portland's drinking water system."

The LT2 rule is important for drinking water quality and public health protection. The provision that requires drinking water systems to choose between covering their finished water reservoirs, or treating the water leaving uncovered reservoirs before distributing it to consumers, is intended to protect against the potential for re-contamination of treated drinking water in uncovered finished water reservoirs with disease-causing organisms, specifically *Cryptosporidium*, *Giardia*, and viruses.

The EPA will conduct a thorough review of the LT2 rule. As part of the review, EPA will assess and analyze new data and information regarding occurrence, treatment, analytical methods, health effects, and risk from *Cryptosporidium*, *Giardia*, and viruses to evaluate whether there are new or additional ways to manage risk while assuring equivalent or improved public health protection. Science will drive our ultimate decision.

We intend to hold a public meeting in the spring of 2012 to present and discuss new information related to uncovered finished water reservoirs. The City of Portland is encouraged to participate and to present any information at that meeting, which the EPA will be happy to consider as part of its regulatory review process. EPA looks forward to continuing to work with the City of Portland and other stakeholders as we move forward in this review process.

In your letter you also request a delay of implementation of the LT2 rule requirement to cover open finished water reservoirs while the LT2 review process is underway, taking into consideration the unique circumstances faced by public water systems. The rule review process does not provide a basis to modify the City of Portland's LT2 compliance obligations. Thus, the requirements of the LT2 rule are and will continue to be in effect throughout the LT2 review process. However, there may be specific facts that warrant compliance schedule adjustments. Many public water systems face multiple challenges as they manage, maintain, and operate their systems. In addition, infrastructure construction projects may also present challenges. It is entirely appropriate for primacy agencies to evaluate these system-specific facts when evaluating a request to adjust a compliance schedule. If a schedule

adjustment is appropriate, the public water system should have robust interim measures in place to ensure public health protection, and those interim measures should remain in effect until that system comes into compliance with the rule.

Many public water systems have already taken action to protect their drinking water as required by the rule, and many others are on a path to do so in the near future. In the 1970s, there were an estimated 700 uncovered reservoirs in the United States. In 2006, at the time the LT2 rule was promulgated, the number of uncovered reservoirs had been reduced to 81. Since then, public water systems have taken steps to cover, decommission, or treat the water before distributing it to consumers at an additional 38 reservoirs. Today, only 43 uncovered finished water reservoirs are still in use, all of which are under enforceable schedules to meet the LT2 rule's cover or treat requirements. Of these 43 reservoirs, most are currently undergoing construction or have schedules to complete construction in the next few years.

Thank you for taking the time to share the City of Portland's concerns. The EPA appreciates Portland's commitment to delivering safe water to its customers. If you have additional questions, please feel free to contact me, or your staff can contact Greg Spraul in the EPA's Office of Congressional and Intergovernmental Relations at (202) 564-0255.

Sincerely,

Nancy K. Stoner

Acting Assistant Administrator

Karen M. Fell, Acting Assistant Director Water System Operations New Jersey Department of Environmental Protection Bureau of Safe Drinking Water March 27, 2012 Page 3

the surrounding communities should a serious interruption of water supply occur as examined and modeled in the DHS Exit 14 Study.

As discussed at the November 1, 2011 meeting, it is the City's understanding that, based upon clarification by the NJDEP, other alternative options may exist that would allow the entire Reservoir volume to be maintained, while still satisfying the requirements of the ACO. It is our understanding that because of the layout and configuration of the Cedar Grove Reservoir some of the items that resulted in the UV treatment option as not being considered cost effective may in fact be waived by the NJDEP, which may result in the UV treatment option being more cost-competitive when compared to covered storage. However, in order for the City to more effectively re-evaluate the UV treatment option, clarification and confirmation is needed from the NJDEP on the following issues:

- The Cedar Grove Reservoir is an open impoundment and falls within a drainage area.
 While the reservoir is provided with drainage channels around its perimeter that capture and help in diverting runoff, it is recognized that there is runoff that enters the reservoir. If the NJDEP agrees that runoff into the reservoir is deminimus and acceptable in volume, then a concrete diversion wall will not be required.
- 2. The Water Department routinely samples the water leaving the Cedar Grove Reservoir and tests for Cryptosporidium, Giardia and viruses. This testing has been performed over the past nine (9) years. Copies of those tests results have been submitted to the NJDEP and EPA. During the nine (9) years of sampling and testing, all results for Cryptosporidium, Giardia and viruses were negative. This testing demonstrates that the finished water is high quality and that filtration of this supply is not warranted.
- 3. The Cedar Grove Reservoir is at a location and elevation where ground water intrusion should not be an issue and any ground water entering the reservoir when the Reservoir is full would be minimal. If the NJDEP agrees that the Cedar Grove Reservoir is not under the influence of ground water and any ground water entering the reservoir would be deminimus and acceptable in volume, then a reservoir liner with all appurtenances would not be required.
- 4. If the current full volume of the Cedar Grove Reservoir remains available, the City of Newark can continue to be an emergency supply of water for Newark and other users in North Jersey. This has been the case since the Cedar Grove Reservoir was constructed. If the clarifications requested results in a determination that the use of UV followed by chlorination will not suffice in satisfying the ACO, the City of Newark is left with no option other than the elimination of the Cedar Grove Reservoir and the construction of covered storage as recommended in the December 29, 2010 study submitted to NJDEP. If it is so desired by the State or the DHS to maintain a substantially larger volume of water at Cedar Grove for emergency purposes, the financial burden of providing any

Karen M. Fell, Acting Assistant Director Water System Operations New Jersey Department of Environmental Protection Bureau of Safe Drinking Water March 27, 2012 Page 4

additional storage, beyond that volume recommended in the HMM Study, would have to be borne by the other potential users or the State of New Jersey.

- 5. If the NJDEP is amenable to waiving the runoff issues noted above, and UV treatment is then found to be a cost-competitive alternative to covered storage, the plan would be to provide additional chlorine disinfection facilities following UV treatment in a similar fashion as the City has been doing for years. In addition, from the point of chorine application sufficient contact time shall exist before the first customer.
- 6. Should the NJDEP waive the need for runoff diversion and groundwater intrusion protection, what assurances will NJDEP provide to the City that the City will not be required to provide enhanced treatment (filtration or other treatment techniques) in the future should Cryptosporidium, Giardia or any viruses be found in the uncovered reservoir?
- 7. If NJDEP's review of the regulations is such that UV treatment followed by chlorination, and no modifications to Cedar Grove Reservoir, will not satisfy the requirements of the ACO, and the currently selected alternative of draining the Cedar Grove Reservoir and the construction of concrete storage tanks is selected, additional permit issues must be addressed. These permit issues are the water lowering permit and the storm water that will accumulate when the reservoir is drained and permanently empty. The City recently received a water lowering permit from the NJDEP Division of Fish and Wildlife while repairs were being performed to the Reservoir outlet piping. A permit requirement was to refill the reservoir by a specified date. It is not known if the NJDEP Division of Fish and Wildlife will issue a permit to permanently drain the Reservoir. Also when the reservoir is removed from service, the rainfall that would accumulate within the drained reservoir bottom must be handled and removed from the site. It is suspected that the volume of runoff that would accumulate will be substantial due to the impervious nature of the bed of the Reservoir.
- 8. The construction of either alternative, covered storage or UV treatment, will require approvals from the local municipalities, including, but not limited to, Little Falls, Cedar Grove and Montclair, where the construction would occur. It is believed that the ability to obtain the necessary permits and approvals will be a long and difficult process, probably delaying any compliance schedule that is ultimately developed and should be considered in the final ACO schedule.

If NJDEP is willing to waive the issues noted above, we would consider the following as a potential compliance schedule:

- Amend Alternatives Evaluation Study (including internal reviews and review and approval by NJDEP)
 Six (6) months
- 2. Solicit Technical Proposals and Development of Detailed Design Eighteen (18)

Karen M. Fell, Acting Assistant Director Water System Operations New Jersey Department of Environmental Protection Bureau of Safe Drinking Water March 27, 2012 Page 5

months

3. Permitting, Local Approvals and NJEIT Financing

Twelve (12) months

4. Public Bidding and Contract Award

Six (6) months

5. Construction and Startup

Eighteen (18) months

Total time to satisfy the ACO

Sixty (60) months

We would appreciate receiving the NJDEP's comments on the issues outlined above. While attempting to preserve the maximum volume of water available for use it is mandatory that the City selects a long term solution that is not subject to future changes in interpretation or revised regulations and that satisfies the ACO in the most economical method possible.

If you have any questions or need additional information please contact Joseph Beckmeyer at 973-733-6303.

-- I look forward to hearing from you.

Sincerely,

Michael E. Greene, ESQ. Acting Director

Department of Water and Sewer Utilities

CC: Julien X. Neals ESQ. Business Administrator

Linda Watkins- Brashear, Executive Director NWCDC

Andrew Pappachen, Licensed Operator

Joseph Beckmeyer, PE Consultant

Paul Mourt PE Hatch Mott MacDonald



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

MAR 2 1 2012

OFFICE OF WATER

Mr. Eric King City Manager City of Bend 710 NW Wall Street Bend, Oregon 97701

Dear Mr. King:

Thank for your letter of February 6, 2012, regarding the city of Bend, Oregon's compliance with the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2).

Under the LT2 rule, the City of Bend is required to meet the source water treatment requirements of the rule no later than October 1, 2012, and the State of Oregon can allow an additional two years (until October 1, 2014) if capital improvements, such as those you mentioned in your letter, are needed to meet regulatory requirements. The LT2 rule does not allow for further compliance extensions for the source water treatment requirements, and the state is obligated under the Safe Drinking Water Act to address any failure to meet those deadlines. We recognize that many public water systems face multiple challenges in managing, maintaining, and operating those systems, and we understand that the Oregon Health Authority is working with the City of Bend and has requested that as a first step the City of Bend conduct a detailed analysis of financial and technical data to determine the earliest feasible date by which the city can comply with the LT2 treatment requirements and provide a specific time schedule proposal for the state's review.

Again, thank you for your letter. The U.S. Environmental Protection Agency (EPA) appreciates your city's commitment to delivering safe water to its customers. If you have any further questions, please contact me or call Cynthia Dougherty, Director of EPA's Office of Ground Water and Drinking Water, at (202) 564-3750.

Sincerely,

Nancy K Stoner

Acting Assistant Administrator



February 6, 2012

710 NW WALL STREET PO Box 431 BEND, OR 97791 [541] 388-5505 TEL [541] 385-6676 FAX BENDOREGON.GOV

Nancy Stoner Assistant Administrator for Water U.S. Environmental Protection Agency, Office of Water Ariel Rios Building 1200 Pennsylvania Avenue N.W. Washington, DC 20460

Dear Administrator Stoner,

JEFF EAGER The City of Bend, Oregon is a wonderful community and we are proud of our efforts to make it one of the most livable communities in the United States. For us, that includes ensuring that our community has a safe and abundant water supply. We have spent considerable resources reinvesting into our water system and protecting the watershed in which one of our water supplies is located -Bridge Creek. This success has led to a vibrant and growing community but has increased demand on our infrastructure, leading us to substantially improve our water and wastewater system. It is from this perspective that we approach compliance with the Federal Long Term 2 Surface Water Treatment Rule ("LT2") promulgated in 2006. Pursuant to the rule, Bend is obligated to build a treatment plant at its Bridge Creek water source by October 2014.

Mayor Pro Tem TOM GREENE

City Councilor

JODIE BARRAM

KATHIE ECKMAN City Councilor

JIM CLINTON City Councilor

MARK CAPELL City Councilor

SCOTT RAMSAY City Councilor The rule does not provide flexibility beyond that date -- yet without flexibility the City faces the choice of not complying or inappropriately staging improvements to its water system and unduly burdening its citizens at a time when its residents are weathering a slow economic recovery. It is encouraging that the LT2 rule is being reviewed as part of the Environmental Protection Agency's ("EPA") period review process. The LT2 rule calls for the treatment of open source drinking water and also implements rules related to open drinking water reservoirs. Both have compliance deadlines, but only the open reservoir portion of the rule provides flexibility on meeting compliance deadlines - allowing the state or EPA to negotiate with a system on the appropriate compliance date. We would encourage the EPA to provide more flexibility for systems and States to agree on compliance schedules for the treatment requirement as you have for the reservoir portion of the rule.

ERIC KING City Manager While the rule allows a community to pursue a variance for treatment, the City is not pursuing a variance, but does need additional flexibility in timing the construction of a treatment plant. This is not the case of a community trying to avoid the requirement. The City of Bend fully supports the EPA's underlying goal of the LT2 rule in wanting to provide the healthiest, anti-microbial source of drinking water possible. While Bend's paramount priority is protecting public health, technological and economic considerations as discussed below necessitate a later deadline then the current October, 2014 requirement.

To fully and effectively accomplish LT2 compliance, Bend must undertake two significant projects. The first is replacing transmission lines that deliver the source water and would service the new treatment facility. The second project would be the actual construction of the treatment facility. For both technical feasibility reasons and because of Bend ratepayer's unique situation, we believe that

these projects must be sequenced in a way that requires additional time for construction of the treatment facility.

Background and Setting

Over the last two decades, Bend has been characterized by an exceptionally high growth rate, becoming the fastest growing city of comparable size in the state. By 2005, Bend's population had surpassed its 2020 forecast, 15 years earlier than anticipated, growing by over 60,000 people, or 365%, since the last urban growth boundary expansion in 1981. Adopted projections predict that the population will swell to 115,065 by 2028. This growth resulted in significant increases in water and sewer demands and the City needed to commit to the accompanying infrastructure improvements required to keep pace with that growth, as well as projected population increases. As you are well aware, Bend, along with the rest of Oregon and the country, has been hit by the worst recession in recent memory. As the bottom fell out of the economy, Bend's reliance on two volatile industries—real estate/development and tourism—made it especially susceptible to alarming levels of unemployment, foreclosures, and poverty.

Bend has one of the highest unemployment rates in the State, stubbornly remaining above 12%. Even modest utility rate increases during such a period of high unemployment became a serious burden on ratepayers already struggling to make ends meet. Over 15% of Deschutes County residents have incomes below the poverty level and over half of children in the County are eligible for free or reduced lunch rates. While foreclosures have been in the national spotlight, Bend has been an epicenter for the crisis as our foreclosure rate rose again to over five percent.

As is well known even in the national news, Bend's economy has been dependent on the real estate development industry to provide employment. The continued drag on housing development and the lack of other primary industries will mean that the City's economic recovery will be slow and unemployment will remain high. Substantial water rate increases during this period of slow economic recovery and high unemployment is detrimental to Bend's struggling families. Bend's economy heavily relies on tourism. That tourism is served by a network of small family owned businesses, like restaurants that use a large volume of water. Water rate increases impact these small businesses and hamper their ability to survive this recession and slow recovery.

Water Line Replacement

The City has two transmission mains that deliver high quality Bridge Creek water to Bend. One of these lines was built in the 1920's and the other in the 1950's. These lines currently run through forest service property as well as private property. Years of unmanaged vegetative growth threaten the integrity of the pipes. In addition, residential structures have encroached upon the lines — in many cases either on the pipes or within a few feet. This encroachment poses a serious potential danger for health and life safety if either of these lines were to fail. Lastly, these lines run at velocities that are well beyond standard engineering design practices today. As a result, the velocity has degraded the interior wall linings of the pipes and poses the risk of line collapse. All of these factors have put the City of Bend in a position that in order to continue the use of the Bridge Creek water supply, the City must replace these lines.

Complicating replacement of these lines, the Federal Highway Administration ("FHWA") and Deschutes County are planning on a complete rebuild of the existing Skyliners Road, under which the City wishes to relocate the transmission lines. A map of Skyliners Road and the City's project is attached. Federal funding is available for replacement of the road and the FHWA currently plans on project construction occurring in 2013. The County, FHWA, and the City of Bend have all been working together so that the City can install the pipeline in the roadway prior to the reconstruction. The City is at nearly 90% design for the pipe replacement project, and has been working closely with the Forest Service on the NEPA process. In addition, the design of the new pipe will actually improve some environmental conditions. The City is not able to shut down the current lines on a routine basis, and thus the City diverts a constant rate of 18.2 cfs, even if the City does not take that much water into its distribution system. The replacement of the transmission lines with a thick walled steel pipe designed to hold the water pressure will allow the City to only take water when the system demands warrant, and when the City demand does not warrant, the water will by-pass the intake on Bridge Creek, and the flow will remain in the upper reach of Turnalo Creek below Turnalo Falls and end the potential for erosion.

Because of the financial circumstances related to the road reconstruction and potential collapse of the lines, replacement of the lines must precede construction required for LT2 treatment. If line replacement were delayed, not only is line failure a very real and present threat, but if the 2013 road construction window is missed, the federal funding for the roadway project could be jeopardized. If the treatment facility required by the LT2 rule were constructed first, it is also entirely possible that the lines would fail and the treatment plant would become a stranded asset, essentially useless until the City could replace/repair the failed pipe.

If the City decided to delay its main transmission line replacement, the federal funding schedule for the accompanied road reconstruction project would likely be lost. Additionally, if the road reconstruction project did proceed without coordination of the City rebuilding its transmission line, the City would be prevented from replacing its main transmission lines for five years, per County code. The result would be a requirement for the City to entirely reconstruct a lane of the newly reconstructed road. A low estimate of this additional cost is \$4-7 million dollars; a more likely estimate is closer to ten million dollars depending on what the County ultimately requires the City to reconstruct. Moreover, the City has already pre-purchased steel for the 6.5 miles of the pipeline at a cost of approximately \$4 million dollars, at a time when steel prices were relatively low. In short, delay of the line replacement is impractical, expensive and makes LT2 treatment potentially ineffective.

The estimated cost of the pipeline replacement on its current schedule is \$30 million.

Flexibility is Needed

The LT2 treatment and pipeline replacement projects, as well as other necessary sewer projects (treatment plant and interceptors) are all critical to the public health and economic stability of our community. Bend residents and businesses simply cannot afford to pay for both of the water projects simultaneously. The City has been aggressive in pursuing both the line replacement (already purchasing the steel) and in moving towards the design of the treatment facility. However, as the recession has lasted longer than expected and Bend's recovery will be even slower, it has become abundantly clear that these two projects need to be sequenced. We believe that achieving full compliance with LT2 later than 2014 is crucial to achieving those goals.

We urge you to review the treatment deadlines on the open source water portion of the rule and provide the same flexibility to Bend and others that you have already provided to communities with reservoirs. This flexibility will allow the City of Bend to sequence compliance in a way that avoids devastating impacts to the community while protecting public health and safety. Thank you for both your time and consideration as you proceed with your review.

Sincerely,

Eric King City Manager

Cc: Senator Merkley Senator Wyden

Representative Walden

Fw: concerned citizen

Nancy Stoner

to:

Diane Jones-Coleman 10/22/2012 06:42 PM

Hide Details

From: Nancy Stoner/DC/USEPA/US

To: "Diane Jones-Coleman" < Jones-Coleman. Diane@epamail.epa.gov>

Pls assign to OGWDW for response, thx Nancy K. Stoner

From: "Stephanie Stewart"

Sent: 10/22/2012 11:54 AM MST

To: Nancy Stoner

Subject: concerned citizen

October 22, 2012 via email

Dear Ms. Stoner -

I am a citizen of Portland, Oregon, and I have a question on which I hope you can provide insight. It is about our very fine drinking water and the EPA regulation known as the Long Term 2 Enhanced Surface Water Treatment Rule (we call it LT2).

As an administrator of water, I trust you've heard about Portland's unique watershed up at <u>Bull Run</u>. It is deeply embedded within hundreds of acres of primitive forest land that has been closed to humans, livestock and industry for over 100 years. If you ever get the chance to taste our water, don't pass it up. It is cold and clear and *remarkably good*. What's more, it is demonstrably and exceptionally clean. It is as close as America comes to water that is both microbe *and* chemical free.

Our water flows of its own accord 26 miles from Bull Run into town (thanks to gravity and the brilliant engineering of Colonel Issac Smith over a hundred years ago). Once in town it rests in a number of perfectly placed reservoirs, five of which are grand, open reservoirs. These are well engineered concrete structures

protected from surface runoff contamination. These reservoirs are nestled up in the hills of two of our most prized public parks.

The people of Portland love their open reservoirs, not just because they are beautiful, but because they are part of an elegantly designed, ultra environmentally friendly, low consumption system that delivers them water that keeps their laundry looking new for years, water that brews world class beer (one of our few profitable industries), water that is gentle on the human body at all ages and stages, and water that is as close to organic as is possible in the industrialized world.

So, we are wondering why our request for a delay in our LT2 compliance plan was denied? Our water is pure, we have robust measures in place to ensure public health that really work, and we can prove it with scientific data (large water volume testing has been done on multiple occasions – such samples were taken from our open reservoirs as part of the 2009 AwwaRF study 3021). Our accounting books are more red than black and we have dire needs that demand our resources elsewhere. We have an aging water infrastructure underground here that won't wait for attention, and we are currently so far in debt that a full 50% of what our Water Bureau takes in each month is eaten up just managing the debt. We are easily in as difficult a position as Rochester, NY. And, we have clean water.

Can you help us figure out why Rochester was granted a 10-year reprieve from LT2 projects when they asked, but we were denied that same request? Is there a process by which our denial can be re-evaluated by the EPA?

Sincerely,

Stephanie Stewart
Concerned American in Portland, Oregon

5/2012



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

DEC 1 6 2009

Mr. Randy Leonard Commissioner Office of Public Safety City of Portland 1221 SW Fourth Ave Room 210 Portland, Oregon 97204

OFFICE OF WATER

Dear Commissioner Leonard:

Thank you for your letter of November 4, 2009, summarizing our meeting regarding the Portland public water supply and the requirements of the Long Term 2 Enhanced Surface Water Treatment Rule (LT2 Rule) on October 27, 2009. The purpose of this letter is to clarify the applicability of variances for uncovered finished water reservoirs under the Safe Drinking Water Act for the LT2 rule.

The LT2 Rule requires public water systems with uncovered finished water reservoirs to cover the reservoirs or treat the water supply from those reservoirs before delivering it to consumers. As discussed at length in the LT2 preamble, studies reviewed by EPA found that uncovered finished water reservoirs were subject to contamination from many sources including birds, animals, humans, algae, insects and airborne deposition. Several studies found *Cryptosporidium* and *Giardia*, both of which can result in gastrointestinal illness, in uncovered finished water reservoirs.

The uncovered finished water reservoirs of the Portland Water Bureau are vulnerable to these sources and types of contamination and subject to the requirements of LT2 rule. Neither of the two types of variances available under the Safe Drinking Water Act, Sections 1415 (a) (1) (B) or 1415 (a) (3), cited in your letter are applicable in this circumstance.

Section 1415 (a) (1) (B) of the Safe Drinking Water Act allows for a variance from treatment requirements in situations where EPA finds that the public water system has demonstrated that treatment is not required because of the nature of the water system's raw water source. The vulnerability of the uncovered finished water reservoirs of the Portland Water Bureau to contamination is unrelated to the nature of the Portland raw water supply. Section 1415 (a) (1) (B) of the Safe Drinking Water Act is not applicable in this situation.



The variance found in Section 1415 (a)(3) of the Safe Drinking Water Act is also not available to the City's uncovered finished water reservoirs. That section allows the Administrator to grant a variance with an alternative treatment technique in lieu of rule requirements if the alternative is at least as efficient in lowering the level of the contaminant of concern as the treatment technique specified in the rule. The only alternative treatment technique that was considered in the proposed rule for uncovered finished water reservoir provisions in LT2 is a risk mitigation plan. EPA did not include this alternative treatment technique as a compliance option in the final LT2 rule, finding that a risk mitigation plan would not provide public health protection equivalent to covering or treating the finished water. (71 FR 714-715 (Jan. 5, 2006)). As a result, a Section 1415(a)(3) variance is not available for the uncovered finished water reservoir requirements.

The compliance plan and schedule for meeting the LT2 requirements for the City's uncovered finished water reservoirs was submitted on March 27, 2009, and the City should proceed with implementing that compliance plan and schedule.

I will continue to work with you and your staff to find a path forward in implementing the LT2 Rule for the Portland public water system. If you have any questions, please contact me or Cynthia Dougherty, Director of the Office of Ground Water and Drinking Water, at (202) 564-3750.

Sincerely,

Peter S. Silva

Assistant Administrator